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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/406,353	09/28/1999	TOM GIAMMARESSI	533/044	1515
56015	7590	08/29/2005	EXAMINER	
MOSER, PATTERSON & SHERIDAN, LLP/ SEDNA PATENT SERVICES, LLC 595 SHREWSBURY AVENUE SUITE 100 SHREWSBURY, NJ 07702			SENFİ, BEHROOZ M	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/406,353

Applicant(s)

GIAMMARESSI, TOM

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22, 24-36 and 38-44 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-22, 24-30, 36 and 38-44 is/are rejected.
- 7) ☐ Claim(s) 31-35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. In view of the Board's decision on April 28, 2005, and the newly discovered references to Taylor et al (US 6,298,071) and Farber et al, "Robust H.263 Compatible Video Transmission For Mobile Access To Video Servers", IEEE 1997, PROSECUTION IS HEREBY REOPENED.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 17-22, 24-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 17, a single claim which claims both an apparatus and the method steps of using the apparatus is indefinite. Ex Parte Lyell, 17 USPQ2d 1548 (Bd. PA&I. 1990).

Re claim 18, line 4, "said first and second steps" has no antecedent basis.
Claims 19 – 20 depend on claim 18.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 17 – 22, 24 – 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Taylor et al (US 6,298,071).

Re claim 17, Taylor et al discloses a video-on-demand (VOD) distribution system (fig. 1, also col. 5, line 10-15) comprising provider equipment (30) and subscriber equipment (40-1...40-n), said provider equipment providing VOD content to said subscriber equipment via a forward channel ("LINK"), said subscriber equipment requesting said VOD content via a back channel ("BACK Channel"), a method comprising the steps of:

determining whether said VOD distribution system has sufficient bandwidth available to provide VOD content requested by a subscriber (col. 2, line 4-26, col. 5, line 1-9, col. 6, line 33-34, col. 8, line 35-43);

providing, in the event of appropriate bandwidth availability, said requested VOD content to said subscriber using stored content encoded in a manner adapted to utilize said appropriate bandwidth (col. 5, line 16-31, col. 7, line 63-67, col. 8, line 44-50; in Taylor, in the event of appropriate link bandwidth, the stored content i.e. VBR is utilized);

and providing, in the event of minimum bandwidth availability, said requested VOD content to said subscriber using stored content encoded in a manner adapted to

utilize minimum bandwidth (col. 5, line 32-47, col. 7, line 63-67, col. 8, line 44-50; in Taylor, in the event of minimal link bandwidth, the stored content i.e. CLBR is utilized).

Re claims 18-19, further require “repeatedly” waiting, in the event of less than minimum bandwidth availability, for a predetermined period of time; and repeating said first and second steps of providing said requested information. (In Taylor, it is inherent that when the link bandwidth is not sufficient to even accommodate the CLBR when minimal link bandwidth is available, a “wait time” is repeatedly check until the link bandwidth gets back to the level to accommodate sending either the VBR or the CLBR stored encoded contents in accordance to claim 17).

Re claim 20, further comprising the step of denying, after said predetermined number of iterations, access to said requested VOD content to said subscriber. (In Taylor, it is inherent that when the link bandwidth is not sufficient to accommodate either VBR or CLBR contents, a request for these content will necessarily be denied).

Re claim 21, wherein said bandwidth determination is made with respect to at least one of a video server bandwidth, a video switch bandwidth, a transport processor bandwidth and a digital video modulator bandwidth. (See fig. 1, “Buffer Memory”, “MUX”, “MODULATOR”, “LINK” are the respective bandwidths as claimed, see col. 3, line 44 – col. 4, line 54).

Re claim 22, wherein a first level of bandwidth is allocated to each subscriber upon establishing a respective session, said first level of bandwidth being sufficient to support a navigation function. (See col. 3, line 62 – col. 4, line 43. In Taylor, the first

level of bandwidth is established by the scheduler routine 200, which accommodate navigation function at the set top terminal via remote control).

Re claim 24, wherein said appropriate bandwidth level represents a bandwidth level sufficient to provide said requested information to said subscriber without qualitatively degrading said requested information (col. 5, line 16-31), and said minimum bandwidth level represents a bandwidth level sufficient to provide said requested information to said subscriber where said requested information is qualitatively degraded (col. 5, line 32-46).

Re claim 25, wherein the at least one of a video server bandwidth, a video switch bandwidth, a transport processor bandwidth and a digital video modulator bandwidth are modeled based upon expected component loading levels. (Discussion in claim 21 is referenced here. See also col. 3, line 66 – col. 4, line 9).

Re claim 26, wherein said component loading levels are determined with respect to the type of VOD content requested (col. 11, line 18-28).

Re claim 27, wherein said VOD content type comprises one of a video, audio, audiovisual and data type (col. 4, line 24-27, col. 11, line 18-28).

Re claim 28, wherein said VOD content types comprise video formats having differing quality levels (discussion of claim 24 is referenced here. See also col. 5, line 16-55. In effect, VBR and CLBR have different quality levels).

Re claim 29, wherein information requests from each of a plurality of requesting subscribers are used to provide VOD content type data for modeling the component loading levels, said subscriber requests for VOD content being aggregated to control

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bandwidth utilization levels such that information degradation is managed in an orderly fashion. (Col. 3, line 1-21, line 62 – col. 4, line 9, col. 8, line 20-43).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 30, 36, 38-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al '071 in view of Goode et al, US 6,166,730.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Re claim 30, Taylor et al discloses a video-on-demand (VOD) distribution system (fig. 1, also col. 5, line 10-15) comprising provider equipment (30) and subscriber equipment (40-1... 40-n), said provider equipment providing VOD content to said subscriber equipment via a forward channel ("LINK"), said subscriber equipment requesting said information via a back channel ("BACK Channel"), provider equipment apparatus comprising:

an information server (30), for providing said requested VOD content using stored content encoded in a manner adapted to utilize an appropriate bandwidth in the case of appropriate bandwidth availability (col. 5, line 16-31, col. 7, line 63-67, col. 8, line 44-50; in Taylor, in the event of appropriate link bandwidth, the stored content i.e. VBR is utilized), and for providing said requested VOD content using stored content encoded in a manner adapted to utilize a minimal bandwidth in the case of at least minimal bandwidth availability (col. 5, line 32-47, col. 7, line 63-67, col. 8, line 44-50; in Taylor, in the event of minimal link bandwidth, the stored content i.e. CLBR is utilized).

Taylor et al does not teach a session manager, for receiving VOD content requests from said subscriber equipment and determining, for each received request, whether said VOD distribution system has sufficient bandwidth available to provide the requested VOD content; and wherein the information server coupled to the session manager as claimed. However, Goode et al does (fig. 1: 106). The session manager examines its memory to determine if an open session exists to accommodate VOD content requested by a particular user (col. 17, line 8-18). Goode et al teaches the benefits of the session manager (SCM) to manage set top terminal sign-on and time out, authentication, configuration, and control protocol termination; alarm management and frequency assignment; session security; service selection and control; event notification and usage metering; and a subscriber's access to account information. Commands and requests from the set top terminals are processed by the SCM and appropriate requests are made to the file server to perform certain information navigation and movie-on-demand functions (col. 7, line 65 - col. 8, line 7).

Therefore, the combined teaching of Taylor et al and Goode et al as a whole would have rendered obvious the session manager as claimed for the same benefits as suggested by Goode et al as noted above.

Re claim 36, the claim has been analyzed and rejected w/r to claim 22.

Re claim 38, the claim has been analyzed and rejected w/r to claim 24.

Re claim 39, the claim has been analyzed and rejected w/r to claim 25.

Re claim 40, the claim has been analyzed and rejected w/r to claim 26.

Re claim 41, the claim has been analyzed and rejected w/r to claim 27.

Re claim 42, the claim has been analyzed and rejected w/r to claim 28.

Re claim 43, the claim has been analyzed and rejected w/r to claim 29.

Re claim 44, the claim has been analyzed and rejected w/r to claim 17.

6. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Farber et al, "Robust H.263 Compatible Video Transmission For Mobile Access To Video Servers", IEEE 1997.

Re claim 17, Farber et al discloses a video-on-demand (VOD) distribution system comprising provider equipment and subscriber equipment, said provider equipment providing VOD content to said subscriber equipment via a forward channel, said subscriber equipment requesting said VOD content via a back channel (Abstract, p. 78, left col., top para), a method comprising the steps of:

determining whether said VOD distribution system has sufficient bandwidth available to provide VOD content requested by a subscriber (p. 73, left col., 1st para of "Introduction");

providing, in the event of appropriate bandwidth availability, said requested VOD content to said subscriber using stored content encoded in a manner adapted to utilize said appropriate bandwidth; and providing, in the event of minimum bandwidth availability, said requested VOD content to said subscriber using stored content encoded in a manner adapted to utilize minimum bandwidth. (P. 73, right col., first and last para.; Farber discloses in the first para. reducing video bit-rate to "match" network bit-rate i.e. bandwidth availability, and in the last para., storing multiple bit-streams of different rates at the video servers. Also, p. 74, para 2.2: "Bit-Stream Switching". In Farber, the bitstreams with different bit-rates are intended for normal bit-rate real-time video transmission and low bit-rate video transmission) .

Allowable Subject Matter

7. Claims 31-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Re claim 31, the prior art of record, especially Taylor et al and Goode et al, fail to anticipate or render obvious the further limitations of "said session manager, in response to a determination that less than a minimum bandwidth is available, waiting for

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a predetermined period of time and determining, for each received VOD content request not being fulfilled, whether said VOD distribution system has sufficient bandwidth available to provide the requested VOD content” as claimed.

Re claim 33, the prior art of record, especially Taylor et al and Goode et al, fail to anticipate or render obvious the further limitations of “a transport processor, for packetizing information provided by said information server; said session manager determining said VOD distribution system bandwidth with respect to at least a bandwidth utilization level of said transport processor” as claimed.

Re claim 34, the prior art of record, especially Taylor et al and Goode et al, fail to anticipate or render obvious the further limitations of “a plurality of data storage devices, coupled to said information server via a video switch; said session manager determining said VOD distribution system bandwidth with respect to at least one a bandwidth utilization level of said video switch and a bandwidth utilization level of a storage devices including said requested information” as claimed.

Re claim 35, the prior art of record, especially Taylor et al and Goode et al, fail to anticipate or render obvious the further limitations of “a digital video modulator, for modulating packetized information streams onto a carrier; said session manager determining said VOD distribution system bandwidth with respect to a bandwidth utilization level of said digital video modulator” as claimed.

9. Claims 1 – 16 are withdrawn and claims 23 and 37 are canceled.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

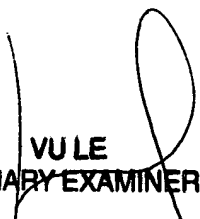
(571) 273-8300

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, Va. 22314.

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. M. S.

8/18/2005


VULE
PRIMARY EXAMINER

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